AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method for prophylaxis and/or treatment of conditions caused or characterized by abnormal loss of cells, comprising: ~~Use of~~ administering to a subject a pharmaceutical composition comprising a compound that, when tested in an in vitro proliferation assay, has an activity that corresponds to at least about 50% of ~~the~~ an activity of SEQ ID NO 2 when tested in ~~the~~a same assay under ~~the~~ same conditions ~~for the manufacture of a pharmaceutical composition for prophylaxis and/or treatment of conditions caused or characterized by abnormal loss of cells~~.

Claim 2 (currently amended): ~~Use~~ The method according to claim 1, wherein the abnormal loss of cell is a degeneration of neuronal cells, or a loss of astrocytes or oligodendrocytes.

Claim 3 (currently amended): The method ~~Use~~ according to claim 1 ~~or 2~~, wherein the abnormal loss of cells is caused by traumatic, asphyxia, hypoxic, ischemic, toxic, infectious, degenerative or metabolic insults.

Claim 4 (currently amended): ~~Use~~The method according to ~~any of claims 1-3~~claim 1, wherein the conditions are selected from the group comprising Parkinson's disease, Alzheimer's disease, stroke, multiple sclerosis, asphyxia or hypoxia, heart failure, heart infarction, arthrosis or arthritis, skin disease and burn injuries, diabetes, liver diseases or failure, muscle diseases or damages, pancreatic dysfunction, and diseases caused by prions, such as Creutzfeld-Jacob's disease, scrapie and bovine spongiform encefalitis (BSE).

Claim 5 (currently amended): ~~Use~~The method according to ~~any of the preceding claims~~claim 1, wherein the abnormal loss of cells is caused by insults to the central or peripheral nervous system.

Claim 6 (currently amended): ~~Use~~The method according to claim 4, wherein the conditions are selected from the group consisting of Parkinson's disease, Alzheimer's disease, stroke, multiple sclerosis, amyotrophic lateral sclerosis, asphyxia or hypoxia, epilepsy, and diseases caused by prions, such as Creutzfeld-Jacob's disease, scrapie and bovine spongiform encefalitis (BSE).

Claim 7 (currently amended): ~~Use~~The method according to ~~any of the preceding claims~~claim 1, wherein the compound has an activity that corresponds to at least about 55%, ~~such as, e. g. ,~~ at least about 60%, at least about 65%, at least about 70%, at least about 75%, at least about 80%, at least about 85%, at least about 90%, at least about 92%, at least about 94%, at least about 96%, at least about 98% or at least about 99% of the activity of SEQ ID NO 2.

Claim 8 (currently amended): ~~Use~~The method according to ~~any of the preceding claims~~claim 1, wherein the compound has an activity that corresponds to at least about 100%, ~~such as, e. g.,~~ at least about 110%, at least about 120%, at least about 130%, at least about 140%, at least about 150%, at least about 160%, at least about 170%, at least about 180%, at least about 190%, or at least about 200% of the activity of SEQ ID NO 2.

Claim 9 (currently amended): ~~Use~~The method according to ~~any of the preceding claims~~claim 1, wherein the compound is identical to SEQ ID NO 2.

Claim 10 (currently amended): ~~Use~~The method according to ~~any of claims 1-8~~claim 1, wherein the compound has an identity corresponding to at least about 75%, ~~such as, e. g.,~~ at least about 80%, at least about 85%, at least about 90%, at least about 95%, at least about 96%, at least about 97%, at least about 98% or at least about 99% to SEQ ID NO 2.

Claim 11 (currently amended): ~~Use~~The method according to ~~any of claims 1-8 or 10~~claim 1, wherein the compound is similar to SEQ ID NO 2.

Claim 12 (currently amended): ~~Use~~The method according to ~~any of claims 1-8 or 10~~claim 1, wherein the compound has a similarity corresponding to at least about 75%, ~~such as, e.g.,~~ at least about 80%, at least about 85%, at least about 90%, at least about 95%, at least about 96%, at least about 97%, at least about 98% or at least about 99% to SEQ ID NO 2.

Claim 13 (currently amended): ~~Use~~The method according to ~~any of claims 1-8~~claim 1, wherein the compound is SEQ ID NO 2, analogues or fragments thereof.

Claim 14 (currently amended): A compound that, when tested in an in vitro proliferation assay, has an activity that corresponds to at least about 50% of ~~the~~ an activity of SEQ ID NO 2 when tested in ~~the~~ a same assay under ~~the~~ same conditions with ~~the~~ a proviso that the compound is not SEQ ID NO 2 or basic fibroblast growth factor BFGF.

Claim 15 (original): A compound according to claim 14 for medicinal use.

Claim 16 (currently amended): A compound according to claim 14, said compound is administered to a subject for ~~use in the~~ a prophylaxis and/or treatment of conditions caused by abnormal loss of cells.

Claim 17 (currently amended): ~~Use~~A method comprising:

administering to a subject ~~of~~ an antagonist to GIP for ~~the~~ a prophylaxis and/or treatment of conditions caused or characterized by hyperproliferation of cells.

Claim 18 (currently amended): ~~Use~~ A method comprising:

administering to a subject ~~of~~ an antibody against GIP for the prophylaxis and/or treatment of conditions caused or characterized by hyperproliferation of cells.

Claim 19 (currently amended): ~~Use~~A method comprising: ~~of~~

administering to a subject a pharmaceutical composition comprising an antagonist to the GIP receptor ~~for the~~a ~~preparation of a pharmaceutical composition~~ for ~~the~~ a prophylaxis and/or treatment of conditions caused or characterized by hyperproliferation of cells.

Claim 20 (currently amended): ~~Use~~The method according to ~~any of claims 17-19~~claim 17, wherein the conditions are selected from neoplastic or cancer diseases such as, e. g., melanoma, non-small-cell lung cancer, small- cell lung cancer, lung cancer, hepatocarcinoma, retioblastoma, astrocytoma, glioblastoma, leukemia, neuroblastoma, pre-neoplastic lesions such as adenomatous hyperplasia and prostatic intraepithelial neoplasia, carcinoma in situ, cancer in the gum, tongue, head, neck, breast, pancreas, prostate, kidney, liver, bone, thyroid, testicle, ovary, mesothelia, cervix, gastrointestinal tract, lymphom, brain, colon, sarcoma and bladder.

Claim 21 (currently amended): ~~Use~~The method according to ~~any of claims 17-19~~claim 17, wherein the conditions are selected from tumor- associated diseased, rheumatoid arthritis, inflammatory bowel disease, osteoarthritis, leiomyomas, adenomas, lipomas. hemagioomas, fibromas, vascular occlusion, retenosis, atherosclerosis, oral hairy leukoplasia, benign prostatic hyperplasia, or psoriasis.

Claim 22 (currently amended): ~~Use~~A method for prophylaxis or treatment of overweight and/or obesity comprising:~~of~~

administering to a subject a pharmaceutical composition comprising a compound ~~that when tested in an assay as described in Example 9, wherein rats are given the compound~~ which when given intraventricularly in the brain of rats, followed by the recordation of the weight of each rat-, the compound has an activity in reducing weight gain that corresponds to at least about 50% of the activity of SEQ ID NO 2 or SEQ ID NO 4 when tested in ~~the~~ a same assay under ~~the~~ same conditions using a compound having SEQ ID NO 2 or SEQ ID NO 4 as a control~~, for the manufacture of a pharmaceutical composition for the prophylaxis or treatment of overweight and/or obesity~~.

Claim 23 (currently amended): ~~Use~~The method ~~of a compound~~ according to claim 22, wherein the pharmaceutical composition further comprises a carrier allowing the transport of the compound across the blood brain barrier.

Claim 24 (currently amended): ~~Use~~The method according to claim 22 ~~or 23~~, wherein the compound has an activity that corresponds to at least about 55%, ~~such as, e. g. ,~~ at least about 60%, at least about 65%, at least about 70%, at least about 75%, at least about 80%, at least about 85%, at least about 90%, at least about 92%, at least about 94%, at least about 96%, at least about 98% or at least about 99% of the activity of SEQ ID NO 2 or SEQ ID NO 4.

Claim 25 (currently amended): ~~Use~~The method according to ~~any of claims 22-24~~claim 22, wherein the compound has an activity that corresponds to at least about 100%, ~~such as, e. g. ,~~ at least about 110%, at least about 120%, at least about 130%, at least about 140%, at least about 150%, at least about 160%, at least about 170%, at least about 180%, at least about 190%, or at least about 200% of the activity of SEQ ID NO 2 or SEQ ID NO 4.

Claim 26 (currently amended): ~~Use~~The method according to ~~any of claims 22-25~~claim 22, wherein the compound is identical to SEQ ID NO 2 or SEQ ID NO 4.

Claim 27 (currently amended): ~~Use~~The method according to ~~any of claims 22-25~~claim 22, wherein the compound has an identity corresponding to at least about 75%, ~~such as, e. g. ,~~ at least about 80%, at least about 85%, at least about 90%, at least about 95%, at least about 96%, at least about 97%, at least about 98% or at least about 99% to SEQ ID NO 2 or SEQ ID NO 4.

Claim 28 (currently amended): ~~Use~~The method according to ~~any of claims 22-25 or 27~~claim 22, wherein the compound is similar to SEQ ID NO 2 or SEQ ID NO 4.

Claim 29 (currently amended): ~~Use~~The method according to ~~any of claims 22-25 or 27~~claim 22, wherein the compound has a similarity corresponding to at least about 75%, ~~such as, e. g. ,~~ at

least about 80%, at least about 85%, at least about 90%, at least about 95%, at least about 96%, at least about 97%, at least about 98% or at least about 99% to SEQ ID NO 2 or SEQ ID NO 4.

Claim 30 (currently amended): ~~Use~~The method according to ~~any of claims 22-29~~claim 22, wherein the compound is SEQ ID NO 2 or SEQ ID NO 4, analogues or fragments thereof.

Claim 31 (currently amended): A compound ~~that when tested in an assay as described in Example 9, wherein~~ having an activity in reducing weight gain that corresponds to at least about 50% of an activity of SEQ ID NO 2 or SEQ ID NO 4 when ~~rats are given~~ the compound ~~or a compound having SEQ ID NO 2 or SEQ ID NO 4~~ is given intraventricularly in the brain of rats, followed by the recordation of the weight of each rat ~~has an activity in reducing weight gain that corresponds to at least about 50% of the activity of SEQ ID NO 2 or SEQ ID NO 4~~ when tested in ~~the~~a same assay under ~~the~~ same conditions.

Claim 32 (original): A compound according to claim 31 for medicinal use.

Claim 33 (currently amended): A compound according to claim 32, the compound provided for ~~use in the~~a prophylaxis and/or treatment of overweight and/or obesity.

Claim 34 (currently amended): A method of prophylaxis and/or treatment of overweight and/or obesity, the method comprising administering to a subject a pharmaceutical composition comprising a compound according to ~~any of claims 31-33~~claim 31 by an intraventricular route.

Claim 35 (currently amended): A cosmetic method for reducing body weight, the method comprising administering to a subject a composition comprising a compound according to ~~any of claims 31-33~~claim 31.

Claim 36 (currently amended): ~~Use~~The method comprising: ~~of~~

administering to a subject a pharmaceutical composition comprising an antagonist to GIP ~~for the manufacture of a pharmaceutical composition for~~ thea prophylaxis and/or treatment of conditions caused or characterized by abnormally low body weight.

Claim 37 (currently amended): ~~Use~~The method comprising: ~~of~~

administering to a subject an antibody against GIP ~~according to claim 36,~~ for thea prophylaxis and/or treatment of conditions caused or characterized by abnormally low body weight.

Claim 38 (currently amended): ~~Use~~A method comprising:

~~of providing~~administering to a subject a pharmaceutical composition comprising an antagonist to the GIP receptor ~~for the manufacture of a pharmaceutical composition for~~ thea prophylaxis and/or treatment of conditions caused or characterized by abnormally low body weight.

Claim 39 (currently amended): ~~Use~~The method according to ~~any of claims 36-38~~claim 36, wherein the condition is selected from anorexia, cachexia, AIDS-or cancer-related wasting, and failure to thrive syndrom in newborn and young children.

Claim 40 (currently amended): A pharmaceutical composition comprising a compound according to ~~any of claims 14-16 or 31-33~~claim 14 together with one or more pharmaceutical acceptable excipients.

Claim 41 (currently amended): ~~Use~~The method comprising: ~~of~~

providing a compound having SEQ ID NO 2 or analogues, functional analogues or fragments thereof for thea manufacture of a pharmaceutical composition for prophylaxis and/or treatment of depression and/or mood disorders.

Claim 42 (original): A method for determining an abnormal level of GIP in the brain of a mammal.

Claim 43 (original): A method according to claim 42 for diagnosis, disease monitoring and/or therapeutic monitoring of a disease characterized by an abnormal amount of GIP in the brain.

Claim 44 (currently amended): A method according to claim 42 ~~or 43~~, wherein the level of GIP in the brain of a subject is low compared to a healthy subject.

Claim 45 (currently amended): A method according to claim 42 ~~or 43~~, wherein the level of GIP in the brain of a subject is high compared to a healthy subject.

Claim 46 (new): The method according to claim 18, wherein the conditions are selected from neoplastic or cancer diseases such as, e. g., melanoma, non-small-cell lung cancer, small- cell lung cancer, lung cancer, hepatocarcinoma, retioblastoma, astrocytoma, glioblastoma, leukemia, neuroblastoma, pre-neoplastic lesions such as adenomatous hyperplasia and prostatic intraepithelial neoplasia, carcinoma in situ, cancer in the gum, tongue, head, neck, breast, pancreas, prostate, kidney, liver, bone, thyroid, testicle, ovary, mesothelia, cervix, gastrointestinal tract, lymphom, brain, colon, sarcoma and bladder.

Claim 47 (new): The method according to claim 18, wherein the conditions are selected from tumor- associated diseased, rheumatoid arthritis, inflammatory bowel disease, osteoarthritis, leiomyomas, adenomas, lipomas. hemagioomas, fibromas, vascular occlusion, retenosis, atherosclerosis, oral hairy leukoplasia, benign prostatic hyperplasia, or psoriasis.

Claim 48 (new): The method according to claim 19, wherein the conditions are selected from neoplastic or cancer diseases such as, e. g., melanoma, non-small-cell lung cancer, small- cell lung cancer, lung cancer, hepatocarcinoma, retioblastoma, astrocytoma, glioblastoma, leukemia, neuroblastoma, pre-neoplastic lesions such as adenomatous hyperplasia and prostatic intraepithelial neoplasia, carcinoma in situ, cancer in the gum, tongue, head, neck, breast, pancreas, prostate, kidney, liver, bone, thyroid, testicle, ovary, mesothelia, cervix, gastrointestinal tract, lymphom, brain, colon, sarcoma and bladder.

Claim 49 (new): The method according to claim 19, wherein the conditions are selected from tumor- associated diseased, rheumatoid arthritis, inflammatory bowel disease, osteoarthritis, leiomyomas, adenomas, lipomas. hemagioomas, fibromas, vascular occlusion, retenosis, atherosclerosis, oral hairy leukoplasia, benign prostatic hyperplasia, or psoriasis.

Claim 50 (new): The method according to claim 37, wherein the condition is selected from anorexia, cachexia, AIDS-or cancer-related wasting, and failure to thrive syndrom in newborn and young children.

Claim 51 (new): The method according to claim 38, wherein the condition is selected from anorexia, cachexia, AIDS-or cancer-related wasting, and failure to thrive syndrom in newborn and young children.

Claim 52 (new): A pharmaceutical composition comprising a compound according to claim 31 together with one or more pharmaceutical acceptable excipients.

Claim 53 (new): A pharmaceutical composition for prophylaxis and/or treatment of conditions caused or characterized by abnormal loss of cells, comprising:

a compound that when tested in an in vitro proliferation assay has an activity that corresponds to at least about 50% of an activity of SEQ ID NO 2 when tested in a same assay under same conditions.

Claim 54 (new): The composition according to claim 53, wherein the abnormal loss of cell is a degeneration of neuronal cells, or a loss of astrocytes or oligodendrocytes.

Claim 55 (new): The composition according to claim 53, wherein the abnormal loss of cells is caused by traumatic, asphyxia, hypoxic, ischemic, toxic, infectious, degenerative or metabolic insults.

Claim 56 (new): The composition according to claim 53, wherein the conditions are selected from the group comprising Parkinson's disease, Alzheimer's disease, stroke, multiple sclerosis, asphyxia or hypoxia, heart failure, heart infarction, arthrosis or arthritis, skin disease and burn injuries, diabetes, liver diseases or failure, muscle diseases or damages, pancreatic dysfunction, and diseases caused by prions, such as Creutzfeld-Jacob's disease, scrapie and bovine spongiform encefalitis (BSE).

Claim 57 (new): The composition according to claim 53, wherein the abnormal loss of cells is caused by insults to the central or peripheral nervous system.

Claim 58 (new): The composition according to claim 56, wherein the conditions are selected from the group consisting of Parkinson's disease, Alzheimer's disease, stroke, multiple sclerosis, amyotrophic lateral sclerosis, asphyxia or hypoxia, epilepsy, and diseases caused by prions, such as Creutzfeld-Jacob's disease, scrapie and bovine spongiform encefalitis (BSE).

Claim 59 (new): The composition according to claim 53, wherein the compound has an activity that corresponds to at least about 55%, at least about 60%, at least about 65%, at least about 70%, at least about 75%, at least about 80%, at least about 85%, at least about 90%, at least about 92%, at least about 94%, at least about 96%, at least about 98% or at least about 99% of the activity of SEQ ID NO 2.

Claim 60 (new): The composition according to claim 53, wherein the compound has an activity that corresponds to at least about 100%, at least about 110%, at least about 120%, at least about 130%, at least about 140%, at least about 150%, at least about 160%, at least about 170%, at least about 180%, at least about 190%, or at least about 200% of the activity of SEQ ID NO 2.

Claim 61 (new): The composition according to claim 53, wherein the compound is identical to SEQ ID NO 2.

Claim 62 (new): The composition according to claim 53, wherein the compound has an identity corresponding to at least about 75%, at least about 80%, at least about 85%, at least about 90%, at least about 95%, at least about 96%, at least about 97%, at least about 98% or at least about 99% to SEQ ID NO 2.

Claim 63 (new): The composition according to claim 53, wherein the compound is similar to SEQ ID NO 2.

Claim 64 (new): The composition according to claim 53, wherein the compound has a similarity corresponding to at least about 75%, at least about 80%, at least about 85%, at least about 90%, at least about 95%, at least about 96%, at least about 97%, at least about 98% or at least about 99% to SEQ ID NO 2.

Claim 65 (new): The composition according to claim 53, wherein the compound is SEQ ID NO 2, analogues or fragments thereof.